THERMAL COATING MATERIALS AND COATING MATERIALS THAT CAN BE CURED THERMALLY AND USING ACTINIC RADIATION AND THE USE THEREOF

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Abstract of **WO03016411**

The invention relates to thermal coating materials and to coating materials that can be cured thermally and using actinic radiation. Said materials contain: (A) a binding agent from the group of polyaddition resins, polycondensation resins and copolymers of olefinically unsaturated monomers that can be physically or thermally cured, cured using actinic radiation or cured thermally and using actinic radiation and that have a stochastic, alternating, block-type structure, or are linear or branched and have a comb-type structure; and (B) nanoparticles, which have been modified by a compound (I): [(S-)o-L-]n-M-(-X-R) m-n, in which the indices and variables are defined as follows: S represents a reactive, functional group comprising a bond that can be activated by actinic radiation; L represents a bivalent, organic linking group; X represents an oxygen atom, sulphur atom or >NR<1>, wherein R<1> = a hydrogen atom or an alkyl group; M represents a metal atom; R represents a monovalent, organic group; o represents 1 to 5; m represents 3 or 4; n stands for m = 3, 1 or 2 and n for m = 4, 1, 2 or 3. The invention also relates to the use of said materials for producing clear lacquers and coloured and/or decorative-effect multi-layer lacquers or as adhesives and sealants.